

IN THE CLAIMS

1. (currently amended) A method of ablating myocardial tissue within the wall of the heart or within the wall of a blood vessel connected to the heart comprising:

(a) supplying microbubbles to the circulatory system of a mammalian subject by introducing the microbubbles into the LA, LV, aorta or a cardiac artery so that the microbubbles perfuse the myocardial tissue of the subject; and

(b) while the microbubbles are present in the myocardial tissue, applying ultrasonic energy to the wall of the heart or to the wall of a blood vessel connected to the heart so that myocardial tissue having microbubbles present therein is heated by the ultrasonic energy and ablated by the heat.

2. (original) A method as claimed in claim 1 wherein said step of supplying microbubbles is performed by introducing the microbubbles into the LA or LV.

3. (original) A method as claimed in claim 2 wherein said step of applying ultrasonic energy is performed by actuating an ultrasonic transducer carried on a catheter structure extending into or through the LA or LV, and wherein said step of supplying microbubbles is performed by administering said microbubbles through said catheter assembly.

4. (original) A method as claimed in claim 1 wherein said step of supplying microbubbles is performed by introducing the microbubbles into the aorta.

5. (original) A method as claimed in claim 1 wherein said step of supplying microbubbles is performed by introducing the microbubbles directly into a coronary artery supplying blood to the portion of myocardial tissue to be ablated.

6. (original) A method as claimed in claim 1 further comprising the step of determining when the microbubbles are

present in the myocardial tissue to be ablated by ultrasonic imaging of the myocardial tissue.

7. (currently amended) A kit for ablating myocardial tissue of a mammalian subject comprising:

(a) an ultrasonic energy application device adapted to apply ultrasonic energy to the wall of the heart or to a blood vessel connected to the heart so as to heat the wall of the heart or the blood vessel and cause ablation by such heating; and

(b) microbubbles adapted for administration within the circulatory system of the subject; and

(c) a catheter adapted to introduce the microbubbles into the LA, LV, aorta or a cardiac artery.

8. (currently amended) A kit as claimed in claim 7 ~~further comprising a~~ wherein said catheter is adapted for insertion into the aorta or into a cardiac artery for administering said microbubbles.

9. (original) A kit as claimed in claim 7 wherein said ultrasonic energy application device is adapted to administer ultrasonic energy to the wall of a blood vessel connected to the heart.

10. (original) A kit as claimed in claim 9 wherein said ultrasonic energy application device is adapted to administer ultrasonic energy to the wall of a pulmonary vein.

11. (original) A kit as claimed in claim 7 wherein said ultrasonic energy application device is adapted to administer ultrasonic energy to the wall of the heart.

12. (currently amended) A kit as claimed in claim 7 wherein said ultrasonic energy device ~~includes~~ is carried on a said catheter structure and said catheter ~~structure~~ extends into

or through the LA or LV when the device is in an operative condition, and wherein said catheter ~~structure~~ includes a lumen having an opening, said opening communicating with the LA or LV when the device is in said operative condition, whereby the microbubbles can be administered by way of said catheter ~~structure~~.